



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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June 16, 2010

Steven Tochko
EHS Remediation Manager
The Boeing Company
P.O. Box 3707, M/C 9U4-26
Seattle WA 98124-2207

**Re: Interim Action for Removal of Concrete Joint Material
North Boeing Field/Georgetown Steam Plant Agreed Order No. DE 5685
Notice of Dispute**

Dear Mr. Tochko:

The Department of Ecology (Ecology) received your response of April 30, 2010 about Ecology's staff decision on April 23, 2010. This staff decision was regarding Boeing's proposed resolution of the dispute concerning an Interim Action for removal of concrete joint material at North Boeing Field (NBF). Your letter included the following responses to Ecology's staff decision:

- Boeing is continuing to dispute the need to remove all concrete joint material (CJM) at NBF with concentrations of polychlorinated biphenyls (PCBs) above 1 mg/kg. Boeing wishes to continue discussions regarding appropriate cleanup levels for concrete joint material at NBF. However, Boeing agreed to remove or remediate all caulking materials, regardless of PCB concentrations, in the Propulsion Engineering Labs (PEL) area of the North Lateral drainage basin. On June 10, 2010, Boeing submitted the *Work Plan Concrete Joint Removal, North Boeing Field, Seattle Washington*. This work plan indicates that roughly half of the CJM will be removed in the PEL area in 2010 with the remaining CJM to be removed in 2011.
- Boeing has agreed to a more rigorous characterization of concrete joint materials at NBF, with the exception of the PEL area where caulk will be removed without prior characterization.
- Boeing will discuss with Ecology the appropriate screening levels that will be used for comparison to results from storm drain structure sampling and testing.
- Boeing has agreed that additional risk analysis may be required for other site contaminants of concern. On May 21, 2010, Boeing submitted to Ecology the *Work Plan Human Health Risk Assessment and Transport Evaluation for Concrete Joint Material, North Boeing Field, Seattle, Washington*. Ecology's contractor is currently reviewing this work plan and comments will be provided to Boeing in June 2010.



- Boeing agreed to prepare detailed sampling plans with rationales for the locations of PCB samples from storm drain structures and concrete joint material. Boeing began sampling and testing and cleaning storm drain structures in May 2010 and is continuing this work into June 2010. On May 21, 2010 Boeing submitted the *Work Plan North Lateral Storm Drain System Evaluation of Potential Sources, North Boeing Field, Seattle, Washington*. This work plan is currently being reviewed by Ecology.
- Boeing will prepare a revised flow chart for the investigation and cleanup of PCB sources at NBF. The revised flow chart will be submitted with the work plans.
- Boeing agreed to prepare work plans for Ecology review for proposed additional investigations at NBF. The work plan for source investigations was submitted to Ecology on May 21, 2010. The work plan for concrete joint removal was submitted to Ecology on June 10, 2010. The work plan for soil investigation and removal is scheduled for submittal to Ecology on June 24, 2010.

Ecology is in general agreement with Boeing's proposals. However there are some outstanding issues that need to be addressed.

- **Concrete joint material removal from the PEL area.** Ecology is in general agreement with Boeing's proposal for removal of concrete joint material from the PEL area. However, there are some concerns with removal of this material without any characterization. While this may be allowed under the Model Toxics Control Act (MTCA) with appropriate sampling and testing for material disposal, it may not be allowed under federal regulations. Boeing must confer with and obtain approval from the U.S. Environmental Protection Agency before proceeding with this work. In addition, the work plan for caulk removal indicates that roughly half of the work will be done in 2010 and the remainder of the work will be done in 2011. **Boeing needs to provide sufficient contractor support to allow all of the caulk removal in the PEL area to be completed in 2010.** Ecology understands that the progress of this work will be weather dependent.
- **Concrete joint removal from other areas of the Site.** Ecology continues to be concerned regarding the presence of caulk in other areas of the site. Recent storm drain structure solids data provided by Boeing indicates there are sources of PCBs into the storm drain system from concrete aprons on the flight line. As an example, elevated levels of PCBs in storm drain solids obtained from structures on the northern concrete apron are shown on Figure 2 of the source evaluation work plan. These data suggest that CJM is a continuing source of PCBs into the storm drain system in areas of the site outside the PEL. Ecology accepts Boeing's proposal for removal of CJM from the PEL area and a more rigorous characterization of CJM in other areas of NBF in lieu of removal of all CJM from NBF. However, Boeing must submit to Ecology a plan for characterizing CJM in areas of the site outside of the PEL and must be prepared to remove additional CJM that is a continuing source of PCBs to the storm

drain system at NBF. Boeing needs to submit to Ecology a schedule for completing this plan.

- **Concrete joint material remediation level.** Until additional technical data is available to suggest a different remediation level for PCB-contaminated caulk, Ecology will continue to use a remediation level of 1 mg/kg as the trigger for caulk removal. **The dispute on this issue is hereby resolved.**
- **Screening levels for analysis of solids from storm drain structures.** Since we do not yet have Slip 4 recontamination modeling results, Ecology intends to continue using the screening levels currently used for comparison to preliminary results from sampling and testing of stormwater and storm drain solids at NBF. These screening levels may change as a result of Slip 4 recontamination modeling or establishment of cleanup levels for the Lower Duwamish Waterway (LDW) in the LDW Feasibility Study.

Ecology is looking forward to meeting with you to discuss these and other issues related to the cleanup of NBF. If you have any questions, please contact me at 425-649-7054.

Sincerely,



Robert W. Warren, P.Hg., MBA
Toxics Cleanup Program, Section Manager
Northwest Regional Office

bw/me/kp

cc: Brian Anderson, Boeing
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